

CLAIMS

1. Process for the preparation of the facial isomer of tris(8-oxoquinoline)aluminum(III) ( $\text{Alq}_3$ ), comprising the step of heating  $\alpha\text{-Alq}_3$  in solid phase at a temperature equal to or higher than  $350^\circ\text{C}$  but lower than  $420^\circ\text{C}$ , to obtain a mixture of  $\gamma\text{-Alq}_3$  and  $\delta\text{-Alq}_3$ .

2. The process according to claim 1, further comprising a step of suspending said mixture in an organic solvent and keeping said suspension at ambient temperature.

3. The process according to claim 2, wherein said organic solvent is acetone.

4. Process for obtaining a thin film of the facial  $\text{Alq}_3$ , comprising the steps of preparation of a solution of facial  $\text{Alq}_3$  in a solvent, at a temperature lower than  $-10^\circ\text{C}$ , application of a thin layer of such solution onto a substrate, and evaporation of the solvent to obtain a thin film.

5. The process according to claim 3, wherein said solvent is  $\text{CHCl}_3$ .

6. Process for obtaining a thin film of facial  $\text{Alq}_3$ , comprising the step of heating a thin film of meridional  $\text{Alq}_3$  at a temperature in the range from  $390$  to  $420^\circ\text{C}$ .

7. Blue emitting electroluminescent device based on facial  $\text{Alq}_3$ .

8. Use of facial  $\text{Alq}_3$  for making electroactive devices suitable for charge transport and/or recombination and/or for light emission.